AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph from page 2, line 23 to page 3, line 13 of the specification with the following amended paragraph.

On the other hand, in recent years, as a material for high frequency semiconductor devices, ~~potassium~~ gallium nitride (GaN) having properties superior even to silicon (Si) or gallium arsenic (GaAs) is coming under attention (Rutberg & Co., Gallium Nitride: A Material Opportunity (2001)). In the fabrication of a GaN device, it is necessary to form a GaN single crystal thin film on some sort of single crystal substrate. As one general type of such a substrate, there is a sapphire substrate. Sapphire has the merit of enabling the stable supply of relatively good quality single crystal, but has a large difference in lattice constant from GaN of 13.8%, so easily induces a deterioration of the quality of the thin film formed on it. Further, the thermal conductivity is a small 0.42 W/cm·K, so there is also a problem in the point of dissipation of heat at the time of device operation. A GaN high frequency device formed on a sapphire substrate cannot currently be said to fully realize the inherent performance of GaN in quality and operating properties. As opposed to this, an SiC single crystal has a small difference of lattice constant with GaN of 3.4%, so a good quality GaN thin film can be formed. The thermal conductivity is also a large 3.3 W/cm·K, so the cooling efficiency is also high. Compared with sapphire and other conventional substrates, a great improvement in the properties of GaN devices can be expected. Therefore, in recent years, expectations have become very high for SiC single crystal substrates even in this field.

Please replace the paragraph at page 8, lines 21 to 25 of the specification with the following amended paragraph.

(20) An epitaxial wafer comprised of a silicon carbide single crystal as set forth in any one of (13) to (18) on the surface of which a ~~potassium~~ gallium nitride, aluminum nitride, or indium nitride thin film or mixed crystal thin film of the same is grown.

Please replace the paragraph from page 12, line 31 to page 13, line 11 of the specification with the following amended paragraph.

The wafer is not particularly limited in size, but the present invention is particularly effective in large size SiC single crystal where the planar distribution of the dopant concentration easily becomes large. A large effect is obtained when the size of the single crystal becomes 50 mm or more, in particular 100 mm or more. The SiC single crystal wafer of the present invention has a high resistivity and further has a high crystal quality, so can be applied to a high operating frequency device. An epitaxial wafer fabricated by forming an SiC single crystal thin film on the present invention wafer by the CVD method etc. or an epitaxial wafer obtained by epitaxial growth of a thin film of ~~potassium~~ gallium nitride, aluminum nitride, or indium nitride or a thin film of mixed crystals of these is good in crystallinity of the SiC wafer forming the substrate, so has superior properties (thin film surface morphology, electrical properties, etc.)

Please replace the paragraph from page 26, line 23 to page 27, line 15 of the specification with the following amended paragraph.

Further, another SiC single crystal ingot produced by a process similar to Example 3 was used to fabricate a mirror surface wafer having an orientation of exactly the (0001) face, a size of 100 mm, and a thickness of 360 μm. This mirror surface wafer was used as a substrate for epitaxial growth of a ~~potassium~~ gallium nitride thin film by the metal-organic chemical vapor deposition method (MOCVD method). The growth conditions of a gallium nitrogen thin film were a growth temperature of 1050°C and flow rates of trimethyl gallium (TMG), ammonia (NH3), and silane (SiH4) of 54 x 10^{-6} mol/min, 4 L/min, and 22 x 10-11 mol/min. The growth pressure was set to atmospheric pressure. By 60 minutes growth, an n type ~~potassium~~ gallium nitride was grown to a thickness of about 3 μm. The thus obtained epitaxial thin film was observed under a Normalsky optical microscope, whereupon it could be confirmed that a high quality ~~potassium~~ gallium nitride epitaxial thin film having an extremely smooth morphology was formed over the entire surface of the wafer.